

# VIRGINIA WILDLIFE

AUGUST 1991 ONE DOLLAR



# Editor's Page

A freeway now runs through the huge, sprawling ranch where my father, sister and I rode horses. The memories of two kids racing their ponies through the cactus and tumbleweed of Southern California weren't worth preserving to a highway department in charge of moving traffic.

But I've always thought that memories meant much more to Virginians. We place historical markers at any obscure spot that needs to be remembered on our highways, and we nail up metal plaques to houses carrying memories we never want destroyed. We fence off sites of famous battles; we even stuffed the horse of our best-loved general. Everything counts. We *want* to remember.

Still, we've let too many memories slip away.

What would our grandparents or great-grandparents say if they could speak of our neglect of the land they once treasured? I wonder how many of us can still point out the place where they lived, the river bank they fished from, the fields they hunted? Instead, we might point a finger across a subdivision and say, "There was the site of the house. There was a field here, once . . . full of quail . . ."

We have paved, bulldozed, and changed our land. Those landmarks, those recognizable corners, humps and hollows have become unfamiliar. They spoke once to a memory, to a past. They no longer speak to a sense of place.

Other folks who aren't Virginians may not feel the same loss of a connection to the past. Californians would feel more optimistic, as if the change were not a loss at all but merely the call to adventure. They are glad to be rid of any past that may haunt them.

Virginians, on the other hand, need to know who lived in their house 100 years ago, they need to feel the bricks and the stones that old hands touched long ago. We buy homes for their memories, for the shadows who stir to walk the halls in the evenings when the apple trees blossom. We like the company of our ghosts.

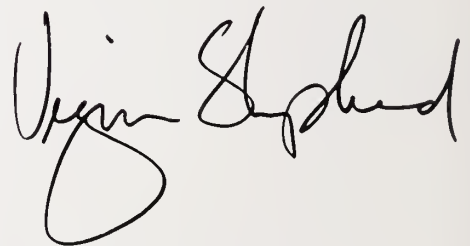
But, we haven't done much of late to make the land hospitable for the spirits of our fathers. We may keep the houses intact, and delight in the search for the saucers and teacups old Virginians brought to their lips, but when it comes to the land they walked, the land they loved because it was *home*, we have erased the memories. Preoccu-

pied as we are with shiny new things, with money, with convenience, with the good life of the 20th century, we don't think twice about selling the family farm, or rezoning the countryside or making life "better" for our children. We like having new department stores in the country and fast-food restaurants on every corner. But we're paying a price for it all. We haven't allowed the land to hold onto its memories.

So, will Virginia still be home in 20 years? Can we come back to the places we knew as children and remember? Memories without a place leave no record, no evidence, no way to explain, no way to keep the connection to the past linked.

Still, someday we might be forgiven for neglecting our past, for not protecting the places that our people once cherished, the places that once made Virginia—and no other—home.

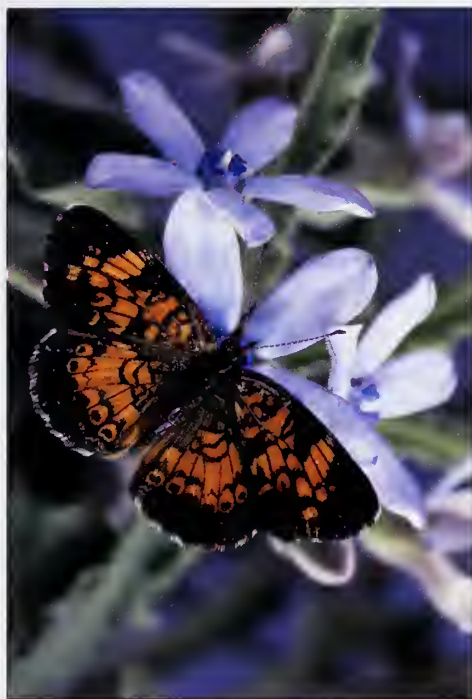
Being Virginians, we may yet come to our senses.

A handwritten signature in black ink, reading "Virginia Shepherd". The signature is fluid and cursive, with a large loop at the end of the last name.

# VIRGINIA WILDLIFE



Anglers in search of smallmouth action will find details of Virginia's "bronzeback triangle" beginning on page 4.



Luring butterflies to your backyard garden is easier than it sounds; see page 14 for details.

**Cover:** Day flying Bella moth (*Utetheisa bella*) on chrysanthemum; photo by David Liebman.  
photo by David Liebman.

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Philpott Lake; photo by Lou Hinshelwood

# The Bronzeback Triangle

By Bruce Ingram

*Smallmouth anglers can experience  
the best in lake fishing for  
smallmouths by hitting  
the triangle of lakes:  
Philpott, Claytor and Moomaw.*

The Caribbean may have its Bermuda Triangle, but here in southwest Virginia we have our very own fishing version of a three-sided geometric shape—the "bronzeback triangle."

Specifically, you can "play connect a lake" by drawing a line from Philpott Lake (2,880 acres in Patrick and Henry counties) to Claytor Lake (4,485 acres in Pulaski County) to Lake Moomaw (2,530 acres in Alleghany County) and within the triangle you create you can experience some of the best smallmouth bassing, impoundment style, that can be found in the Old Dominion.

These three lakes have much in common. They are all excellent example of upland reservoirs, characterized by rocky points, steep sides, narrow coves, and deep, clear, cool water. They also all have as one of their featured species the noble smallmouth bass. And if you are aware of the summertime haunts of these smallies, the warm weather months can be a fine time to pursue this species.

Jerry Paitsel, a truck driver from Covington, is familiar with this trio of highland bodies of water and has some tips on where to look for summer smallies in them.

"Although the three lakes have their own individual peculiarities, since they are all highland reservoirs you can basically fish them the same way," said Paitsel. "In the summertime, the first thing I look for is rocky areas along the old river channel, or in some cases, along a submerged creek channel. If you can find sharp bends on those channels and at the same time find rocky areas, then you should have located the fish."

"Another really good place is a gently sloping rocky point. Because the water on these lakes is so clear, don't look for the fish to be up in the shallow water portions of the points. Look for the bass to

be out in water 15 or more feet deep."

Of course, since Moomaw, Philpott, and Claytor do have considerable numbers of recreational boaters plying their waters at this season, fishing channel bends and sloping points is typically only productive early in the morning and late in the evening. Still, Jerry Paitsel says he has found success at those times by following the bends of the Jackson River on Moomaw, of Goblin Town Creek on Philpott, and of the New River on Claytor.

If shad can be spotted dimpling the surface above these channel bends and rocky points, then topwater baits such as Zara Spooks, Rebel Pop'Rs, and Crazy Shads can be productive. This is because the shad activity results in the smallmouths coming together into schools and pillaging their way through these baitfish. At such times, the bronzbacks are very active and easily caught.

Indeed, while on a recent July fishing trip to Lake Moomaw with Jerry Paitsel and Buster Wilmer of Covington, several times we had the opportunity to witness the voracious nature of schooling bass. Every time we could quickly make our way to the surface feeding fish, hookups resulted, with Paitsel once catching a rotund 2-1/2 pound bass.

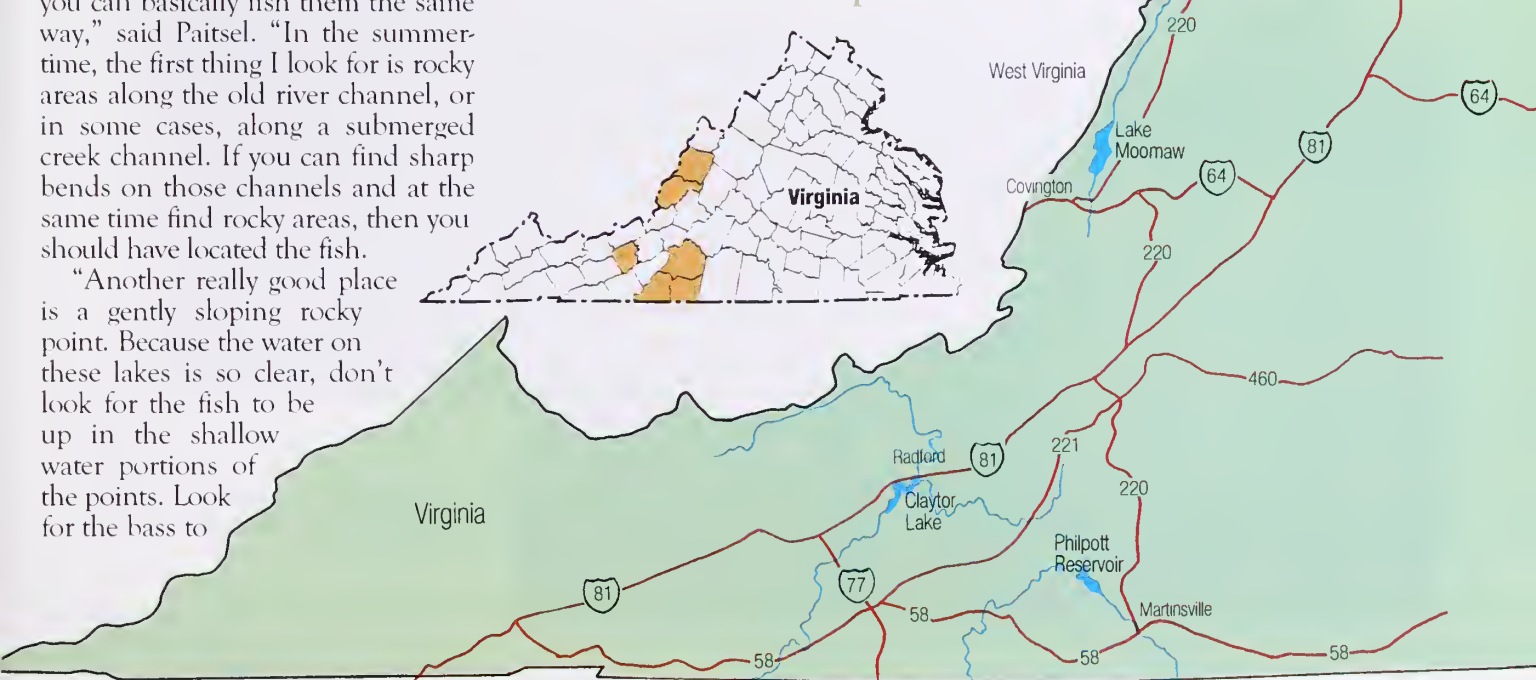
The downside of this action, however, is that it typically doesn't last very long. If you don't get your trolling motor down quickly, and silently make your way to the commotion, then "meal time" will have ended without you ever having been a part of it.

A more reliable pattern on our highland trio is to work your baits deep on the bends and points. Good lures are Hale's Craw Worms, Mister Twister six-inch plastic worms, and deep running crayfish crankbaits. If the fish are actively feeding, then the crankbait option can be a particularly good one.

For example, once while fishing Claytor Lake on a muggy, summer evening, I was able to catch three nice bass from the same point by rapidly retrieving crankbaits across it. And the same scenario was repeated recently on Moomaw, when I utilized Bomber Model A crankbaits to entice four keeper bass from the same gently sloping, rocky point.

When the smallies aren't foraging actively, then it's time to turn to craw worms and plastic crawlers. Last summer, for instance, the smallies on Philpott definitely were not in a feeding

### Location map





mode during one of my trips there. All the topwater lures and crankbaits I utilized failed to draw strikes. Only when I resorted to slowly crawling plastic worms down rocky points did I start to get any action at all.

Besides bends and points, another locale to consider on the Commonwealth's upland reservoirs is a hump. While points are easy to locate by merely cruising down a body of water and while anyone with a good topo map and depth finder can find a channel, humps or bars typically take a little bit more effort to find. This fact makes the fish on this form of structure less pressured and often easier to catch.

A prime hump may lie in 30 or more feet of water with its top coming to within 15 feet of the surface. The fish will often hold on the sides of the hump, particularly the ones on the downcurrent side. Yes, lake smallmouths typically face into the current just as their stream brethren do. Once while on Lake Moomaw, I watched a savvy angler catch keeper after keeper from a hump by yo-yoing a jigging spoon up and down. We were literally out in the middle of the lake, seemingly in the middle of nowhere. But the bass were there, and they were active and unpressured. You may have to spend quite a bit of time looking for humps on Moomaw, Philpott, and Claytor. And you will have to

possess a quality depth finder to begin your search. But the rewards are certainly worth it.

Although satisfying action can be found early in the morning and late in the evening during the summer, often the best bassing on our upland impoundments will be found after the sun goes down. Every summer, I try to spend several nights on Moomaw, Philpott, and Claytor. And after sundown, a different game plan exists for catching mossybacks.

"At night, a good place to start looking for bass is flats, especially those near the main channel," revealed Jerry Paitsel. "You will rarely if ever find bass there during the middle of the day, but they do come up on the flats to feed at night.

"Another super place to find summertime smallmouths at night is a bluff. Don't bother to fish bluffs that have sheer rock walls; there's nothing to hold the fish there. But if the bluffs have huge chunk rocks that have broken off or if rock slides are present, then those areas will attract crayfish which in turn attract the bass."

Dark bladed spinnerbaits are a standard choice for working the flats. The baits should be worked slowly and steadily, thus giving the mossybacks every opportunity to home in on the artificials. For the bluffs, the choice is even more obvious—a jig 'n pig.

Ask any nocturnal angler on Moomaw, Philpott, or Claytor what his or her favorite lure is, and chances are very good that a jig 'n pig will be the answer. By hopping this artificial slowly across some form of rock, you can very authentically duplicate the movement of a crayfish.

When a fish hits a jig 'n pig at night, often you will feel a slight "mushiness" on the other end of your line. But when you do experience that sensation, it's time to set the hook and set it hard. Typically the next sensory experience you will have is hearing the sound of a big smallmouth thrashing about on the ebony surface of the lake.

Because of its after-hours nature, night bassing requires that fishermen take several precautions. I always go fishing with several other people so that if one of the boats breaks down, help will be nearby. It is very foolish—and potentially dangerous—for a sleepy angler to be out on the water alone.

I also always inform my wife when I should be home from a night bassing excursion, and what area of the lake we plan to spend most of our time on. And if I should become overly sleepy while on the water, I always return to the dock and spend the rest of the night in the back of my Blazer. Again, a lake is no place for a fatigued sportsman. Two pieces of equipment that are very useful for after sundown bassing are black lights and fluorescent line. Black lights, which are attached to a craft's sides, cause the fluorescent line to emit a supernatural glow and thus help to more easily detect strikes. This is especially an important attribute when fishing worms or jig 'n pigs.

Fishing Virginia's bronzeback triangle during the summer months can be a great way to enjoy the outdoors. Just remember that the tactics used on Moomaw, Philpott, and Claytor are quite different from the ones employed on Buggs Island or Gaston, for example, and you should be on your way to success. □

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Bruce Ingram is the Virginia editor for Outdoor Life magazine and a frequent contributor to Virginia Wildlife.



Fishing an upland reservoir like Philpott Lake in Patrick and Henry Counties requires the use of specific tactics and a knowledge of the lake bottom to be successful; photo by Bruce Ingram.





*photo by Maslowski*

# Hunting for the Perfect Choke

By Steve Ausband





photo by Spike Knuth

**B**efore I was old enough to shave, I knew how to tell if a 12-gauge shotgun had a full-choked barrel. All you had to do was try to poke a dime down the muzzle. If the dime wouldn't fit, the gun had a full choke. If it would fit, the gun had something else—a modified, maybe, or even something truly exotic, like improved cylinder. I grew up around hard-core duck and goose hunters, and I didn't know many people who would even want to own a gun into which a dime would fit.

Goofy as the idea might sound, there is a perfectly logical reason for checking a gun's choke with a dime. The coin measures .700 inches in diameter, or exactly .006 larger than the industry standard for a full-choked twelve gauge (.694). A modified choke measures .712, and an improved cylinder .723. A true cylinder bore, one having no choke at all, measures .730. The problem is that neither the dime, nor the actual muzzle measurement, nor even the words stamped on the side of the barrel necessarily reflect the exact pattern percentage any individual gun will throw.

Let's examine this business of choke. Many years ago, shotgun barrels were regular, unconstricted tubes with powder and shot in them. When the powder was ignited the shot came out the end in a rapidly expanding cloud. The system worked reasonably well, especially at very close range, and no real refinements were made until the late 19th

century. Several patents for choked barrels were issued after the 1860's, and by the last years of the century, market hunters like Fred Kimble of Illinois (who had invented his own choke device) were demonstrating the effectiveness of the new discovery.

A choke works like the nozzle on a water hose; you screw down the nozzle and get a tighter, more compact stream of water. Open the nozzle up and you get a spray that covers more area up close but doesn't go as far. Screw the nozzle down too tightly, however, and you get a distorted stream that is irregular in its dispersal of droplets of water and not nearly as compact as the ideal constriction. This last situation is analogous to "overchoking" in a shotgun—a situation that occurs when the muzzle constriction is so tight that the pellets are buffeted together and dispersed irregularly rather than being tightly concentrated by the muzzle's constriction.

Most chokes are labelled either full, modified, or improved cylinder. According to industry standards (and shooters' expectations), a full choke should deliver around 70 percent of its pattern into a 30-inch circle at 40 yards. A modified should throw about 60 percent of its pattern into the circle, and an improved cylinder about 50 percent. An unchoked barrel, true cylinder bore, will throw about 30-40 percent of its pattern into the circle. (These are all very rough approximations of what each choke can typically be expected to do.) According to an early (1964) edition of the *Winchester-Western Ammunition Handbook*, each degree of choke should add about five yards to the effectiveness of a hunting shotgun. In other words, if an IC choke is perfect for 35-yard shooting, the modified would do just fine at 40, and the full at 45.

Everything has a price, of course, and the price of a long-range pattern is a very small pattern at close range, making hitting a close, fast-moving target a very challenging piece of work. People who always

use their guns for pass shooting at distant waterfowl are rightly enamored of tight chokes. Those same shooters, however, would have a much tougher time getting a limit of doves or doing respectable work on a covey rise unless they changed guns. Or chokes. For that reason, some people think a modified is the best all-around choke for any shotgun. It is tight enough for almost any duck or goose shooting, and open enough for upland game. It's not a bad compromise, for sure, but a great deal depends on what you feed it.

The interesting wrinkle that comes into play here is that modern loads, with their cushioned shot columns and plastic cups protecting the shot charge during its trip down the barrel, sometimes dramatically increase the effectiveness of the choke. The result is a modified pattern out of an improved cylinder barrel, or a full pattern out of a modified. Furthermore, the use of steel shot, hardened or copper-plated shot, and granulated filler between pellets (such as one finds in some premium loads) may tighten the pattern even more. In recent years, many new guns of different brands tested by the NRA patterned considerably tighter than the markings on the barrels would indicate. This is fine for those who spend the winter in goose pits, but it can certainly be frustrating to a dove shooter, or even to a guy in a duck blind when a brace of teal comes roaring right over his decoys.

I decided to test several different guns with a variety of loads, hoping to find out how much variation there would be among the patterns produced out of barrels which were supposedly choked identically. Although almost all of my shooting (except waterfowl hunting, which demands steel shot) is with handloads, I decided to use some commonly-available factory loads as a basis of comparison. After all, I was interested in seeing what kind of pattern the guy who picks up a couple of boxes of shells the day before the season opened was going to be



throwing with his shiny new gun.

At a local discount store, I found a bargain on some Remington Field Loads with 1-1/8 oz of #8 shot. These are relatively low-priced, commonly-available shells which are very similar to the shells other manufacturers offer at special prices during the popular seasons. They are pretty much what you get when you say to the clerk, "Just gimme a box of 12 gauge shells. Cheap." For comparison's sake, I used some Winchester "Long-Range Super-X" loads in size #4. This is—or rather was, before steel shot became mandatory—a fine, traditional load for the waterfowler. I used it over many a decoy rig and was entirely satisfied with it. My steel shot load was a 2-3/4-inch Winchester "Magnum Super Steel" in size #2. I was tempted to try other loads, but as I got further along in the testing I realized that just establishing some standards with these three, using three different guns, was going to take plenty of time.

I started out with a box of the Winchester "Long-Range Super-X" loads in #4, using an 870 Remington pump, an old L. C. Smith double, and a Ruger Red Label over and under. I wanted to start with the Remington and the Smith for both nostalgic and practical reasons. I had used both of them on dozens of duck hunts, and I had strong opinions about the choking on both guns. The Remington has a modified barrel, but since it always turned thrown clay targets into neat little black puffballs, I suspected that it was closer to full than modified, at least with the loads I usually fed it. (More open chokes *break* targets; tight chokes obliterate them—when you hit them.) The old Smith has killed more ducks at long range than any other gun I own, and I was simply curious to see how it would do on a patterning board.

Pattern testing is slow work, and it ceases to be much fun after about the second box of shells. Still, there is no other way to get an accurate view of what a particular load does in any shotgun. I made some card-

board targets, measured off 40 yards, and prepared to see how many hardened, shot-collar-wrapped #4 shot I could dump inside a 30-inch circle. The results verified my suspicions about duck loads in the first two guns.

The Remington 870, with its "modified" barrel, put an average of 72 percent of the shot inside the circle—full choke performance. Out of the first five shots, I only got a single modified pattern, and I got one pattern that ran 78 percent. The L. C. Smith averaged just over 76 percent from the left barrel, the one that is supposedly choked more tightly than the right. The right barrel (which, by the way, fails the old "full-choke test" by barely admitting a dime) averaged a whopping 81 percent, putting 131 out of 161 hardened #4's inside the circle at 40 yards. So much for the dime test. No wonder the gun was death on ducks!

Patterning also revealed some interesting information about pellet distribution. The Smith's left barrel printed very tight clusters of holes in the target but left gaps in unpredictable places. Generally, the pattern was tightest in the upper right corner, relative to the aiming point. The right barrel's pattern was more evenly distributed and more nearly centered, as was the pattern of the Remington. Actually, the Remington's very evenly spaced 72 percent was more effective looking than some of the patterns from the Smith's left barrel; there were almost no bird-sized empty spaces.

The Ruger was next. I have been using it almost exclusively for the past two years, and I have a lot of confidence in it. It is a little muzzle heavy, so it makes me keep swinging, and I do better with it on everything from quail and doves to ducks than with just about any other shotgun I've ever picked up. I leave the improved cylinder and modified choke tubes in the barrels all the time, so those are the tubes I used most in testing. With the #4 Winchester loads, the barrels averaged 54 percent and 62 percent,

respectively—perfect IC and modified performance. But how things changed when I changed loads!

I started over again with all three guns, using the bargain-priced Remington #8's. Patterns quickly opened up, as I had guessed they would; but I was unprepared for *how much* they would open up. The so-called "modified" Remington averaged 56 percent, or a little less than modified. The right barrel of the L. C. Smith turned in a consistent, beautifully-distributed 67 percent—tight modified. The Smith's left barrel threw a 72 percent pattern for true full-choke performance. The big surprise was the Ruger. Its improved cylinder barrel spread pellets all over the patterning board, averaging just 40 percent inside the 30" circle. The pattern was nice and even; it was just a little thinner than I had expected. The modified barrel threw a 49 percent pattern, or almost exactly what I would have expected from an improved cylinder. No wonder I had made some tricky shots on fast, close-range targets with the heavy gun—I was throwing a pattern the size of a small cast net!

I retired the Smith from the next round of testing, since I had no intention of running steel shot through its thin, old barrels. Anyway, I had always heard that you don't need tight chokes for steel, since it patterns so much more closely than lead. I had always heard that a good modified choke will throw a full choke pattern with steel.

Guess what? It will.

Steel breaks all the rules. It clusters its super-hard pellets into one tight little killing cone and pays almost no attention to the choke designation stamped on the side of the barrel. There are 144 steel #2's in a typical load of Winchester Super Steel, and I do not own a gun which will put less than 67 percent of them into a 30-inch circle at 40 yards. This includes the IC barrel on the Ruger, which seems to have about as much choke as a B-flat clarinet. The Remington pump,

which is not quite a modified barrel with soft #8 shot, and a more-or-less full with hardened, collared #4 lead shot, turns into a rip-snorting, 76 percent shooting, full-choke duck and goose barrel when you feed it steel (I got two 86 percent patterns with the Remington, and the lowest pattern I fired with the steel shot was 70 percent.) The Ruger averaged almost 68 percent with the improved cylinder barrel and a phenomenal 77 percent out of the modified. That didn't make sense, so I fired a few more rounds, and then a few more after that. It was nothing if not consistent. The tightest pattern was a full 90 percent, with 130 of the big pellets in the circle. Look out, mallards!

I figured if I could get a 77 percent pattern out of a choke marked "modified," just by using steel shot, I might turn a full choke barrel into something approximating a rifle. But it didn't work out that way. Most of the patterns out of the full-choke tube were indistinguishable from the ones out the modified barrel, using steel shot. As a matter of fact, the full did slightly less—72 percent—than either the modified tube in the Ruger or the modified barrel on the Remington. With the #4 Super-X load, the Ruger's full choke tube delivered an honest, 70 percent pattern. I didn't try the full with #8 shot, partly because I was running low on cardboard by this time, and partly because I was running out of patience for any more hole counting.

So there you have it: three guns, six chokes (one improved cylinder, three modifieds, and two fulls,) three distinctly different loads, and over 100 patterns averaging anywhere from a slightly constricted cylinder bore to an extra full. Think about that the next time somebody tells you he has a gun with a certain choke in it. Ask him how he knows!

It's important to realize that all the patterns are good—some are just better for certain things, others for different things. You don't need a gun which will always and only be

## Choke Comparison Chart

Gun and choke	Load tested	Average % in target (choke)
Rem 870 (mod)	Field Load #8	56% (IC+)
Rem 870 (mod)	Super-X #4	72% (full)
Rem 870 (mod)	Super Steel #2	76% (full)
LC Smith r. (mod)	Field Load #8	67% (mod+)
LC Smith r. (mod)	Super-X #4	81% (full+)
LC Smith l. (full)	Field Load #8	72% (full)
LC Smlth l. (full)	Super-X #4	76% (full)
Ruger (IC)	Field Load #8	40% (cyl+)
Ruger (IC)	Super-X #4	54% (IC)
Ruger (IC)	Super Steel #2	67% (mod+)
Ruger (mod)	Field Load #8	49% (IC)
Ruger (mod)	Super-X #4	62% (mod)
Ruger (mod)	Super Steel #2	77% (full)
Ruger (full)	Super-X #4	70% (full)
Ruger (full)	Super Steel #2	72% (full)

*The chart above reveals how the actual choke of a gun depends on the shells you put through it. A modified barrel can change to a full barrel or an improved cylinder barrel just by changing shells.*

just one choke, unless you only do one kind of shooting. The trick is just to know what to feed the monster on each occasion. I am perfectly happy to use the Ruger (or, for that matter, the Remington) on a quail hunt or in a field where the doves are coming in like cruise missiles. I'll load up with handloads of chilled #8's or the store-bought equivalent and be pretty sure I won't embarrass myself too terribly. Both guns have also made some clean kills on ducks at the edges of the limits at which I normally shoot at ducks, using tight-patterning steel #2's.

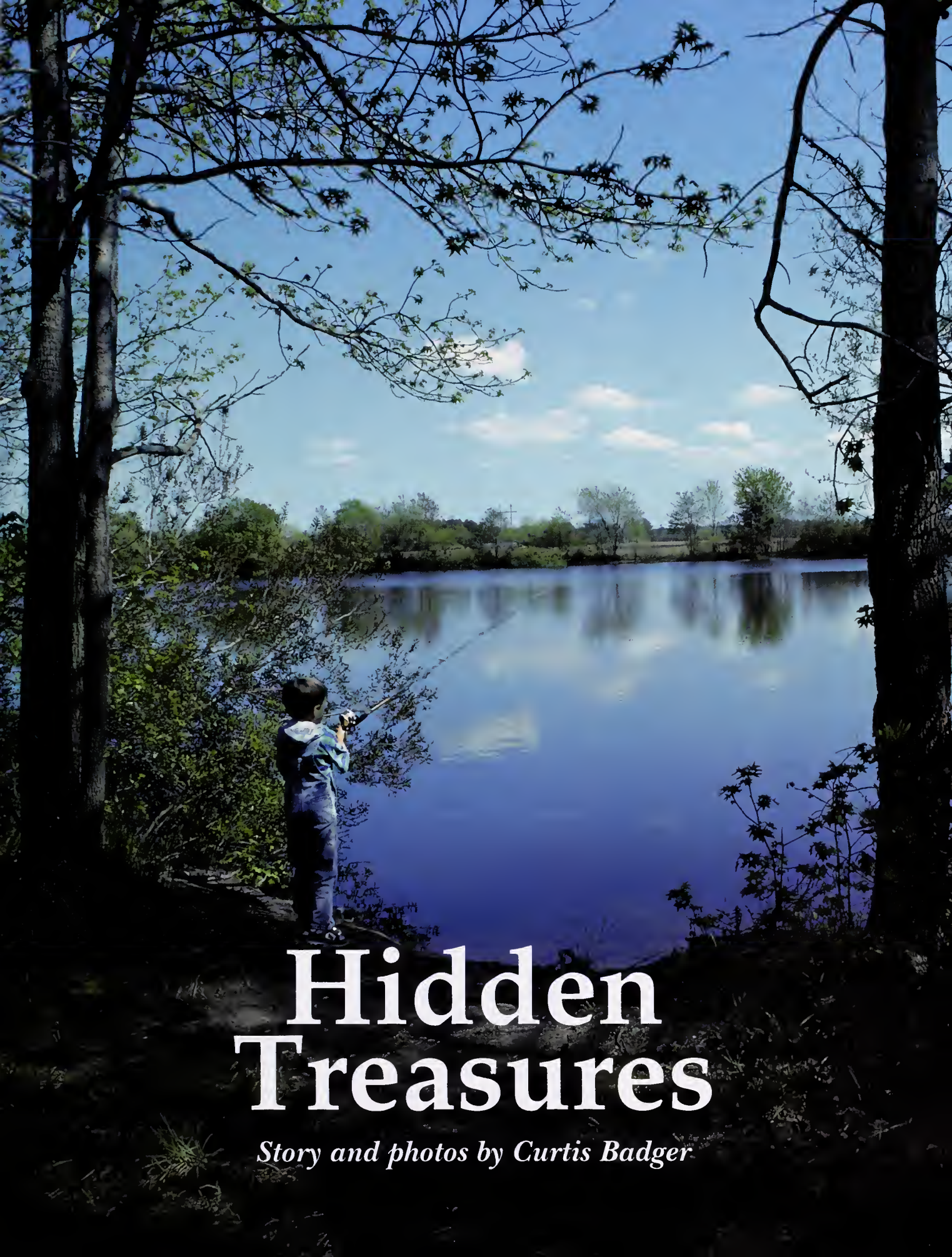
Pattern testing is laborious, but the results are often interesting, particularly when they agree with field experience. I would have liked to have tested some different loads, including some of the buffered, "Premium" varieties, and I would have liked to have tried out some

other guns. Still, I counted enough little bitty holes in enough targets to feel fairly confident that I can predict what kind of pattern percentage I'll get out of a given gun with a given load. If you'd like to duplicate the testing with your own guns and loads, get yourself some big paper or cardboard, draw 30" circles on the stuff, measure off 40 yards, and blast away. You need to shoot at least five targets per load per gun—10, if you can stand all that counting—then take the average. It's not as much fun as, say, shooting clay targets or planning the next dove hunt, but it will tell you a great deal about your equipment.

It certainly is more reliable than sticking a coin down your barrel. □

*Steve Ausband is the chairman of the English Department of Averett College in Danville, and is a frequent contributor to Virginia Wildlife.*



A young boy in a blue and white striped shirt and blue pants is standing on a grassy bank, fishing with a rod and reel. He is positioned on the left side of the frame, looking towards a calm lake. The lake's surface is still, reflecting the sky and the surrounding trees. The scene is framed by the dark, silhouetted branches of trees in the foreground, creating a natural frame around the boy and the water. The sky is a clear, pale blue with a few wispy clouds. The overall mood is peaceful and serene, capturing a quiet moment of outdoor recreation.

# Hidden Treasures

*Story and photos by Curtis Badger*



*The Eastern Shore  
has been known for its out-  
standing saltwater fishery, but  
not many know of its produc-  
tive freshwater ponds.*

Ever since Captain Samuel Argoll wrote to Virginia's Governor Sir Thomas Dale in 1613 that the Eastern Shore "held a great store of fish, both shell-fish and other," this narrow peninsula that separates the Chesapeake Bay and the Atlantic Ocean has attracted anglers from all over the world. Most fisherman, like Argoll, come for the "shell-fish and other," which, depending upon the season, may mean summer flounder, weakfish, sea trout, spot, channel bass, black drum other saltwater species. What many fishermen don't realize is that the Eastern Shore also holds a great store of freshwater fish, both bass and other. A fisherman friend told me not long ago that there are more than 250 freshwater ponds in the two counties of Virginia's Eastern Shore. Since the peninsula is roughly seven miles wide by 70 miles long, that averages out to one pond in every two squares miles.

I found the figure hard to believe until I took a trip in a small plane down the length of the peninsula last spring. From 5,000 feet, the Eastern Shore looks like a miniature version of the Boundary Waters of Minnesota. Farm fields are dotted with irrigation ponds, impounded watersheds flood acres of bottom-land forest, and borrow pits provide sand and clay for construction projects. Most of the ponds are well away from public roads or tucked away in wooded areas, so unless you knew the ponds were there, as Yogi Berra might say, you'd never know they were there. I'd say the estimate of 250 ponds on the Eastern Shore might even be a bit conservative.

Most Eastern Shore fishermen set their seasonal clocks by the arrival of flounder in early April. The first catches of flounder in the

spring signal the unofficial beginning of the fishing season, which comes to an end when the weakfish depart in the fall. But an increasing number of anglers are beginning their fishing seasons not with flounder, but with the movement of bluegills to the spawning beds, or with a few largemouth bass that respond hungrily to the warming of the farm ponds in early spring. "I usually start fishing in freshwater ponds in February, then switch to saltwater in April," says George Phillips of Onancock. After spending the summer either on the Chesapeake or in the seaside bays that separate Virginia's barrier islands from the mainland, George then finishes the season on local ponds in late fall and early winter. Unless there are exceptional cold spells, George catches fish year-round.

"Virginia's Eastern Shore is known for its saltwater fishing, but the freshwater fishing here is excellent, and the best months to fish are March and November, when saltwater action is pretty slow," he says.

For a fisherman who spends most of his time on saltwater, George has compiled an impressive freshwater record. "I began fishing in freshwater ponds when I was 13 or 14," says the 52-year-old Eastern Shore native. "In those days, no one else around here was doing it. I could fish all day and not see another person." George keeps a detailed journal of every fishing trip, noting the weather, location, water temperature, and number and size of fish caught. The results are remarkable. George has more than 500 Virginia freshwater fishing citations for largemouth bass, sunfish, and crappie. He has caught two bass over 10 pounds, eight over nine pounds, 200 over eight pounds, and countless bass that went six pounds or more. Nearly all were taken from Eastern Shore farm ponds, providing ample proof that fishing on the coast does not begin and end with saltwater species.

"Most of the ponds on the Eastern Shore are privately owned, but



landowners will usually give you permission to fish as long as you take care of the property and act responsibly," says George. "Freshwater fishing is a relatively new thing on the Eastern Shore because most people here grew up fishing on the bay and the seaside. In recent years a lot of people have moved to the area who have backgrounds in freshwater fishing, and they've discovered how good some of these ponds are. A bass club was formed several years ago, and they have catch and release tournaments and are involved in conservation issues relating to freshwater, so there is more interest now. I no longer can fish all day and not see anyone else."

One of the most popular Eastern Shore ponds is also one of the largest, although at five acres it is diminutive by most standards. The pond is on the property of the Eastern Shore Agricultural Exper-





*March and November are the best months to fish the freshwater ponds on the Eastern Shore.*

iment Station near Painter, and is known locally as the "experiment pond." The station is operated by Virginia Tech, and is on the site of a former grain mill. The pond was enlarged when the agricultural facility was built in 1960.

"If someone asks permission to fish, we usually let them, as long as they respect the signs we have posted," says Herman Hohlt of the experiment station. "We only own one side of the pond, and the rest is private property, so access is limited."

The experiment pond is typical of Eastern Shore freshwater facilities. It's small, shallow, full of stumps, and is used for farm irrigation. It also has produced some nice bass and sunfish.

"Pond fishing on the Eastern Shore is similar to freshwater fishing throughout the state," says George Phillips, "but in these ponds you have to be a bit more careful.

The average depth is only four or five feet, and most ponds are only a few acres. So you can't bang around in the boat, scuffle your feet, stand up to fish, or otherwise make a lot of noise, or you'll put the fish down. Bass are like any other wild animals. They fear humans and are very wary and cautious. If you're fishing in a small, shallow pond where the water is clear, you have to be very careful."

George uses a small johnboat with an electric motor. The bottom of the boat is carpeted to muffle noise, and he wears clothing that blends with the background. He never fishes with the sun at his back, and he arranges all his gear before leaving shore, thus eliminating the need to move tackle boxes and other gear while fishing.

One advantage in fishing an area which has a multitude of small ponds is that fishing can be a very low-budget sport. Metal-flake bass

boats sporting 200-horsepower engines and state-of-the-art electronics are useless on Eastern Shore ponds. Instead, bring your johnboat, your canoe, or simply fish from the bank.

Lure selection is pretty much conventional. Most fishermen use a variety of spinner baits, and plastic worms are reliable baits for bass. "I use worms in three basic colors: black, blue, and purple," says George. "I usually rig them weedless because most of the ponds here have a lot of stumps and vegetation. Sometimes I'll put a small split shot at the head of the worm, or perhaps a slip sinker. Those three basic colors are all you need. On some days bass will hit a 6-inch worm, and sometimes an 8-inch is more effective."

Tackle runs the gamut from cane poles to the most modern baitcasting reels and rods. George does most of his fishing with the venerable Zebco 33 spincast reel. "I have modern baitcasting equipment, but I got my first Zebco back in the 'Fifties and I've gotten used to it," he says. "It's a good, hardy reel, and I've probably had about 40 of them. My garage is full of Zebco parts. They haven't changed much over the years and the parts are all interchangeable. If one breaks, I can get a part from another reel and fix it."

Farm pond fishing on the Eastern Shore is a little like the old Zebco: simple, dependable, and basic. With so many ponds in the neighborhood, fishing is often a matter of indulging a whim. You get the urge to go, and in about 10 minutes you can be on a pond. You don't need a boat, and you don't need expensive electronics and other equipment. All you need is a serviceable rod and reel, a few lures, and a chance to disappear for an hour or two. And, after all, isn't that what fishing is all about? □

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*Curtis Badger is director of publications for the Wildlife Art Museum of the Ward Foundation in Maryland and is a frequent contributor to Virginia Wildlife.*



*Spicebush Swallowtail on aster*

# Living Color

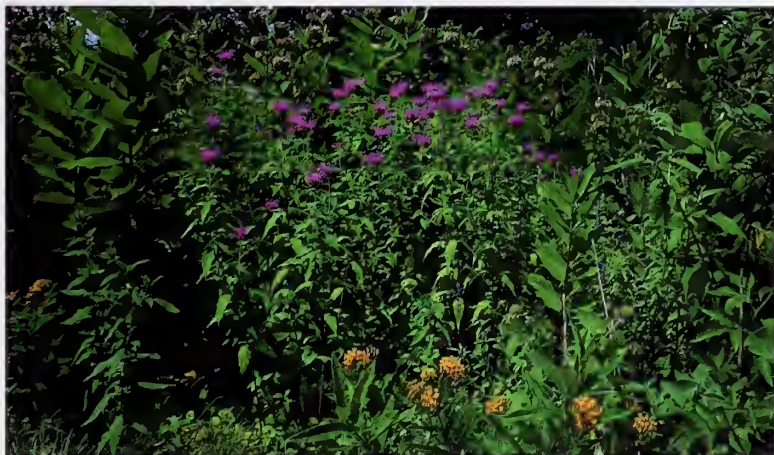




Story and photos  
By David Liebman

*Butterflies can provide  
a rainbow of beautiful  
colors dancing in your  
yard from spring  
through fall, and the  
climate in Virginia  
supports a great variety  
of plants  
that will attract them.*

Gardens



*Butterfly garden, with milkweed (white flowers), monarda (purple flowers) and butterfly weed (orange flowers)*

Attracting butterflies can be done simply by planting any of the following adult nectar sources:

**Butterfly Bush** (*Buddleja davidii*)

An attraction to end all attractions, a very powerful attractant of butterflies by day and moths by night, it flowers best in well drained alkaline soil in direct sunlight. Flowers will last from early June through October if the flower heads are pruned when they begin to seed. 5 - 15 ft.

**Lantana** (*Lantana camara*)

Common as a wildflower in Florida, poisonous if eaten. As flowers mature they change from yellow to orange to red. Mulched heavily, it will usually survive the winter. Blooms all summer. 3 ft.

**Common Milkweed** (*Asclepias* sp.) Long taproot, so one must dig deep even with young plants if transplanting. Can be grown from seeds collected in wild, does best in damp soil. Blooms during month of June. 3 - 5 ft.

**Butterfly weed** (*Asclepias tuberosa*) Orange flowers, blooms all summer in full sun, tolerates dry sandy soil. 3-1/2 ft.

**Bee balm** (*Monarda didyma*) Bees and butterflies become intoxicated from its nectar, also attracts hummingbirds. Full sun, light shade, moist rich soil. 2 - 4 ft.

**Common zinnia** (*Zinnia elegans*) Wide variety of colors, grows quickly from seeds, full sun, annual (replant yearly). 1 - 2 ft.

**Tall phlox** (*Phlox paniculata*) Hardy, two years to flower, will flower all summer, moist slightly acid soil, many colors, mulch in summer. 2 - 4 ft.

**Joe-pye-weed** (*Eupatorium* sp.) Late summer to fall, moist soil, attracts Swallowtails. Stronger in western part of Virginia. 2 - 3 ft.



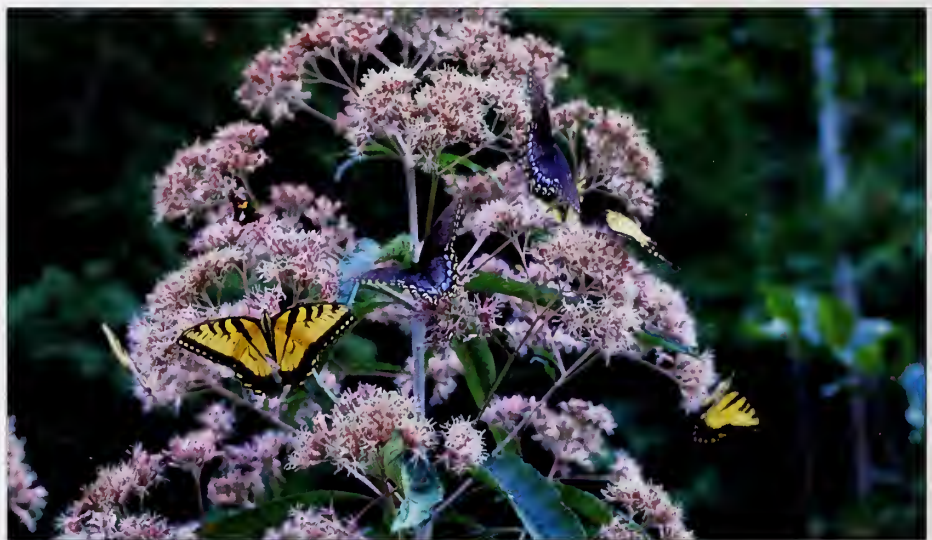
Butterfly bush with Variegated Fritillary



Lantana



Bee balm



Joe-pye-weed with Tiger Swallowtails

**Honeysuckle** (*Lonicera japonica*) Attracts butterflies with long tongues, day flying Clearwing moths, and hummingbirds, late spring to early fall. Must be controlled. Support determines height of vine.

**Petunia** (*Petunia hybrida*) Red not a powerful attractant to butterflies in petunia, summer to fall, sun and moist soil, plant south of taller plants to prevent shading, annual, 1 ft.



# The Miracle of Metamorphosis

A butterfly has a four-stage life cycle composed of egg, larva (caterpillar), pupa (chrysalid), adult. Each stage has specific requirements. An understanding of the life cycles will increase the pleasure and enjoyment of the butterfly gardener. A successful butterfly gardener will use the following knowledge to his advantage.

Eggs are laid on the leaves of specific host plants. A female in search of an egg laying location will taste test potential sights by tapping them with her front feet and sometimes with her antennae. If the taste test is satisfactory, eggs are deposited. If all goes well, the eggs will hatch in a few days to weeks depending on the species, temperature, and humidity. The larva (caterpillar) has many enemies including bacteria, viruses, spiders, insects, mammals, birds, reptiles, and amphibians. Paper wasps are voracious larval enemies—stinging larvae, chewing them into chunks, and flying the pieces back to the paper nest to be consumed by the wasp larvae. If one desires to protect butterfly larvae, a woman's stocking or a bag made of fine mesh material can be used to cover a branch. Don't forget to tie off the end. Larvae can also be raised indoors, if the food plants are changed frequently. Indoor rearing affords maximum protection. As the caterpillar passes through four to five stages of growth the old skin is cast off. These stages are called instars.

In many species, the larva changes coloration and pattern as it progresses to the pupa stage. When the mature larva stops eat-

ing, starts wandering and fades in color, pupation is usually within a matter of days. When a proper site is selected, the larva uses silk to anchor itself to a surface, and then most species remain motionless for about 24 hours. Within a period of a few minutes, the caterpillar skin splits and is cast aside and the pupa emerges.

The pupa hardens into rigid shell in which larval cells reorganize to form the adult butterfly. The pupa is a non-mobile resting stage. A cocoon is a silk covering surrounding a pupa and is produced only by moths. To protect the pupa from birds and animals, bark and stems should be offered, as many pupa turn brown and are camouflaged against these surfaces. Pupation generally lasts a few weeks if the pupa is formed during the summer. If pupation takes place in the fall, the winter is spent as a pupa. When wing pattern and coloration shows through, the pupa becomes very soft and the adult butterfly is soon to emerge.

This complete life cycle can be observed in your backyard. Butterflies usually emerge from the pupa in early morning, moths in early evening. The adult butterfly generally lives up to two weeks in most species. An exception is the Monarch which migrates to Mexico every fall. A few species such as Mourning Cloaks hibernate as adults.

Specific butterfly species require specific food plants for caterpillars and often a different plant for adult butterfly nectaring. If both needs are met, butterflies will remain in the area for a longer period of time.



*Monarch larva*



*Monarch chrysalid*



*Monarch opening wings*

Below are listed the butterflies most likely to visit a Virginia butterfly garden. In addition, their larvae food plants are listed below. The starred \* plants are sure bets if you wish to observe the full life cycle of our butterflies.

**Monarch** (*Danaus plexippus*)

Migrates up to 2500 miles between summer breeding grounds in Canada and Northern United States to Florida and then to Mexico. It has several broods in Virginia, and without migrational fueling help it could become extinct. Larvae in flower heads or underside of leaf. Host plant: Milkweed (*Asclepiadaceae*)\*.

**Viceroy** (*Limenitis archippus*)

Mimics the toxic Monarch, usually found near water. Host plant: Black willow (*Salix nigra*).

**Red-Spotted Purple** (*Limenitis arthemis astyanax*) Eats decaying fruit and sap. Host plant: Wild cherry (*Prunus sp.*).

**Variegated Fritillary** (*Euptoieta claudia*) True gold coloration on pupa. Host plant: Violets (*Violaceae*) \*.

**Great Spangled Fritillary** (*Speyeria cybele*) Not common in the coastal plain. Host plant: Violets (*Violaceae*).

**Tiger Swallowtail** (*Papilio glaucus*) Common throughout Virginia. Host plant: Wild cherry (*Prunus serotina*).

**Spicebush Swallowtail** (*Papilio troilus*) Male has green on hind wings, usually on edge of woods. Larvae showy with large false eyespots. Host plant: Sassafras (*Sassafras albidum*) \*.

**Black Swallowtail** (*Papilio polyxenes*) Low flyer of open fields. Host is the carrot family of plants, especially dill, anise, and parsley (*Apiaceae*).



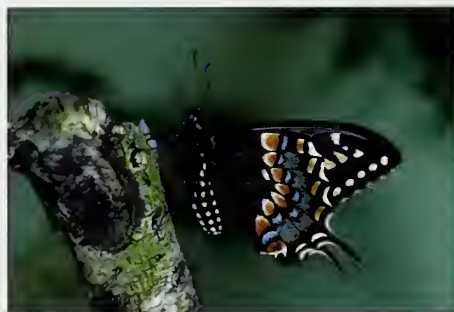
Viceroy on Joe-pye-weed



Giant Cloudless Sulphur



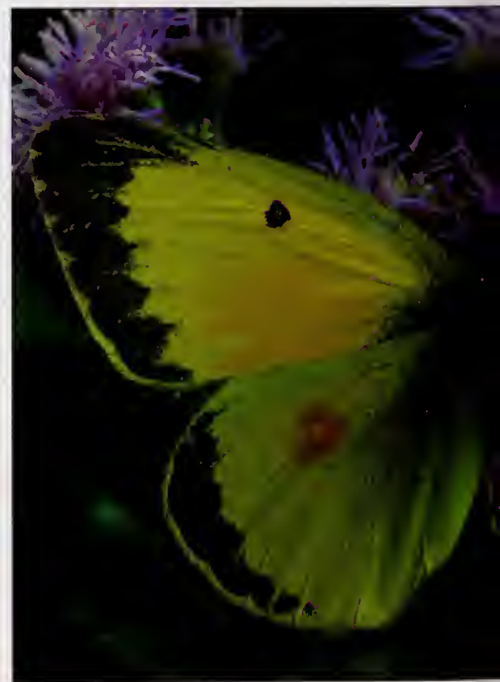
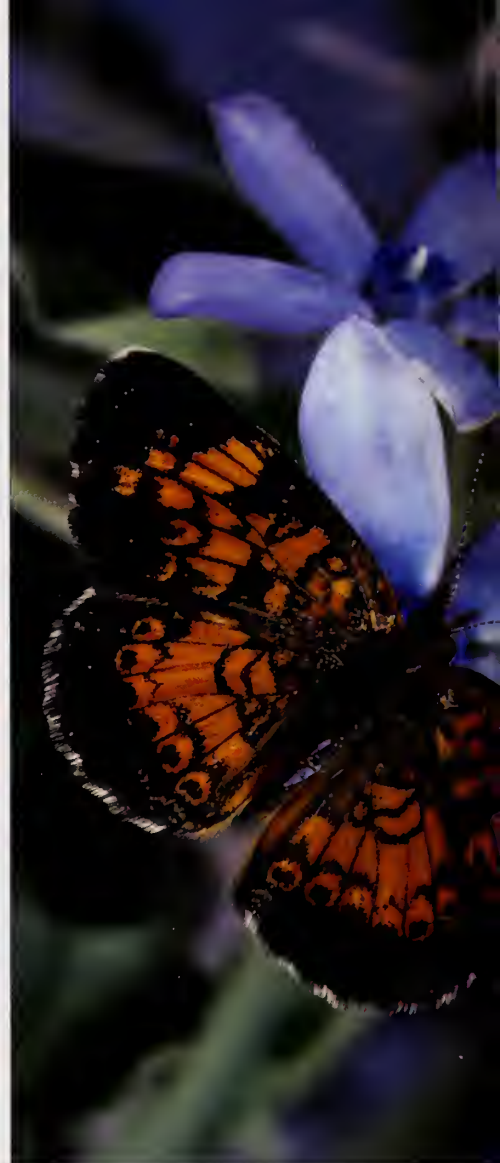
Pipevine Swallowtail



Black Swallowtail



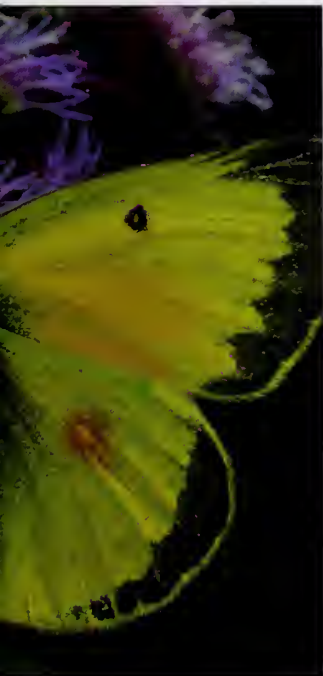
Red Spotted Purple







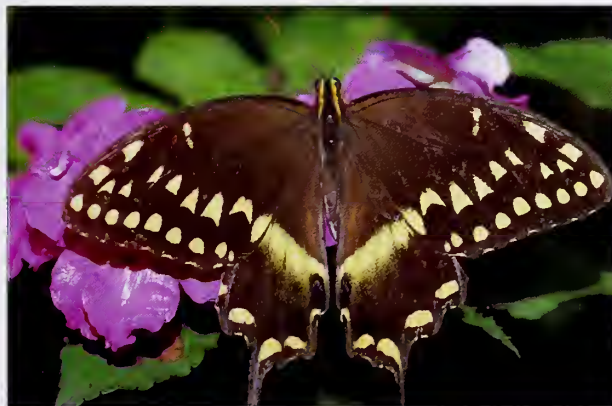
Pearl Crescent



Clouded Sulphur



Zebra Swallowtail on butterfly weed



Palamedes Swallowtail



Cabbage Butterfly (female above, male below)

**Palamedes Swallowtail** (*Papilio palamedes*) Very common in Dismal Swamp. Host plant: Red bay (*Persea borbonia*).

**Pipevine Swallowtail** (*Battus philenor*) Metallic blue hind wings on the male, not common on the coastal plain. Host plant: Dutchman's pipe (*Aristolochia durior*).

**Zebra Swallowtail** (*Eurytides marcellus*) Very long tails. Host plant: Pawpaw (*Asimina sp.*).

**Clouded Sulphur** (*Colias philodice*) Smaller butterfly that may swarm in moist places for a drink. Host plant: Clover (*Trifolium sp.*).

**Giant Cloudless Sulphur** (*Phoebis sennae*) Migrates. Host plant: Partridge pea, senna (*Cassia*).

**Cabbage Butterfly** (*Paris rapae*) Most common butterfly, originally from Europe. Host plant: Broccoli, cabbage, etc. (*Brassicaceae*).

**Pearl Crescent** (*Phyciodes tharos*) Very common small butterfly. Host plant: Asters.

Color preferences vary among species. Butterflies have the greatest range of sensitivity to light wavelength of any known species of animal. Therefore, a variety of flower colors will lure a variety of species. The majority of butterflies will only feed in the sun. Be sure your flowers are in the sun at least some of the day. A butterfly garden can be as small as a window box with zinnias, lantana, or petunia. A single butterfly bush in the yard is also of benefit.

If you live in deep woods or on the edge of woods, a different group of butterflies can be best attracted with rotten fruit such as fermenting grapes, bananas, apples, peaches, etc. A mixture of vinegar, beer, yeast, and sugar painted on a tree in

the shade will also invite butterflies to your yard. Oak sap is also an effective attractant. Butterflies flying under the influence of these intoxicants can often be observed at closer range than normal. Species attracted by these methods include Question Marks, Commas, Mourning Cloaks, Pearly Eyes, Wood Nymphs, Red Spotted Purples, Red Admirals, and Underwing moths.

Some of our most beautiful silk moths such as Luna and Polyphemus do not eat, therefore are not attracted to lures or flowers. Their mouth parts are atrophied and nonfunctional. They can be lured into your yard by placing a virgin female in a screened cage and allowing her to produce pheromones (air-borne sex attractants). Males downwind have been known to travel up to five miles to find the girls. Another method is to use the food plant of the larva. Larvae of Luna eat sweetgum and Polyphemus take oak. Lights also help.

To bring in additional species, observe and identify species found in your area, use butterfly field guides to look up the larval food plants and plant them. Entomologists at agricultural stations, resident naturalists at local parks, etc. can also help make determinations.

**Note:** Pesticides have no use in or near a butterfly garden. They are one of the primary causes of our vanishing butterfly population, secondary only to habitat destruction. Truly, in Virginia, many beautiful species such as the Diana and Regal Fritillary, seldom seen today, may someday soon become extinct. Butterfly gardening could be a method of prolonging the survival of a dwindling population.



There are two types of Clearwing moths in Virginia. The Hummingbird Clearwing is bigger than the Snowberry Clearwing (*Hemaris diffinis*) pictured above, but both are day flying moths that sound like hummingbirds in flight. Plant bee balm, phlox, and butterfly bush for the adult Clearwing. Larvae prefer honeysuckle and Prunus sp.



Great Spangled Fritillary (right); the rare Diana (left)





## Other Resources:

### Butterfly gardens:

Norfolk Zoological Park - Granby St., Norfolk, VA.

Virginia Living Science Museum- (wildflower garden) J. Clyde Morris Blvd., Newport News, VA.

Butterfly World - Tradewinds Park South, 3600 West Sample Rd., Coconut Creek, FL.

Day Butterfly Center - Callaway Garden, Pine Mountain, GA 3122.

### Butterfly gardening publications:

*Seven Ways to Attract Butterflies to Your Garden*, \$3.50 from the Myers Butterfly Farm, 65 Readington Road, Whitehouse Station, NJ 08889.

*Butterfly Gardening, Creating Summer Magic In Your Garden*, by the Xerces Society and The Smithsonian Institution. \$18.95. Sierra Club, 730 Polk St., San Francisco, CA 94109. □

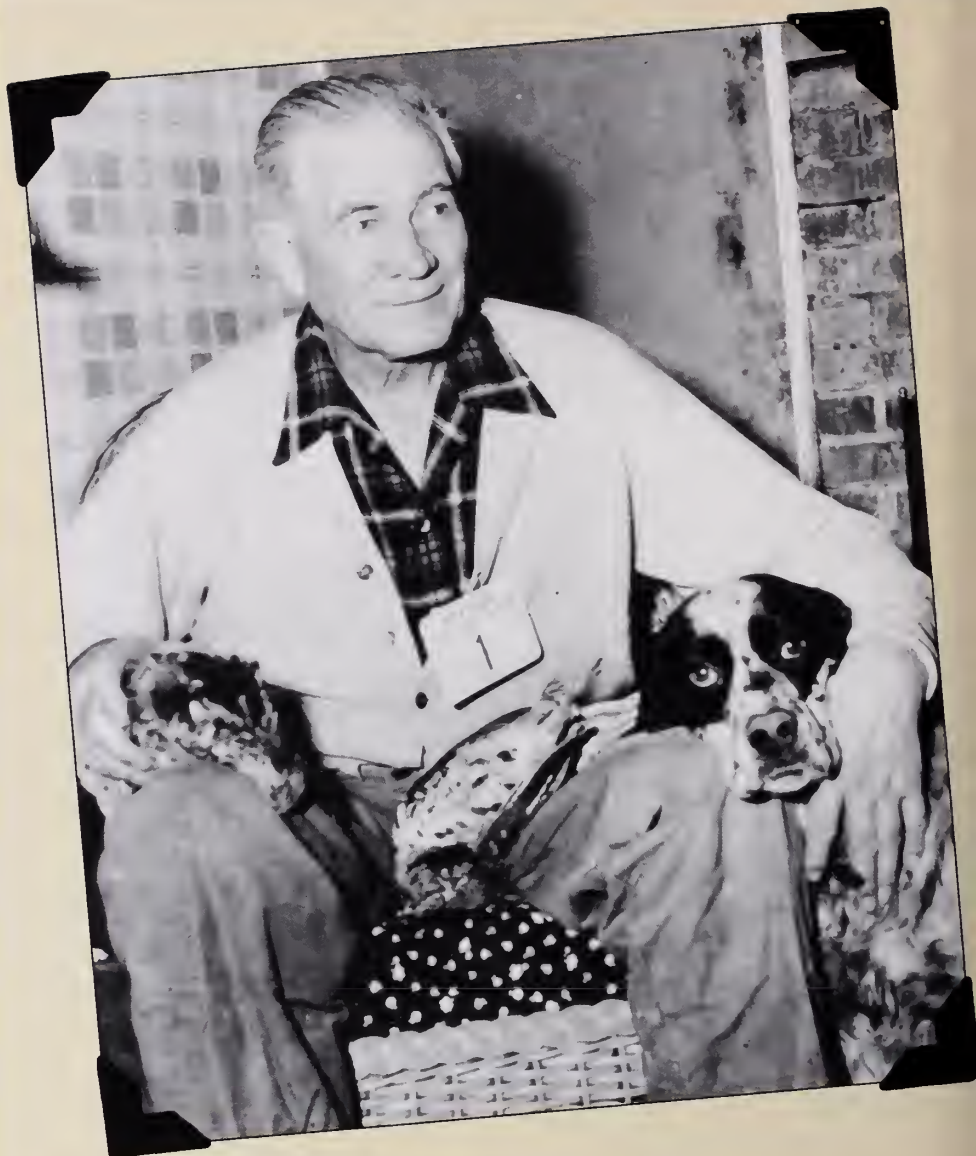
David Liebman is an outdoor photographer, an expert on butterflies, and has been published in several national magazines. He lives in Norfolk.



*Luna moth*



*Polyphemus moth*



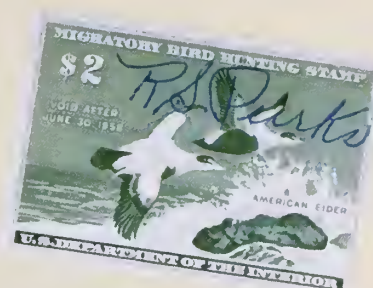
#### A. Willis Robertson

was the chairman of the Department of Game and Inland Fisheries from 1926-1932, and during those hard Depression years learned how difficult it was to manage wildlife without a secure source of funding. Later, in 1937 as a member of the U. S. House of Representatives, he safeguarded the money hunters and fishermen spend on their licenses and sporting equipment by co-sponsoring the bill now called the Pittman-Robertson Federal Aid in Wildlife Restoration. He added a clause which prevented states from raiding hunting and fishing license funds without severe penalty. With the passage of that bill, the future of wildlife conservation in the nation was secure.

Pictured right: Mac D. Hart, the Department's first leader, taking the helm in 1916 as Executive Secretary.



# Looking Back



## *A Scrapbook of Memories*





No person shall hunt, fish or  
first obtaining written permission  
on unposted property of another wi.



This license is valid only when signed below by person to whom issued.  
I certify, under the penalties provided by Sec. 29-76 of the Code of Virginia,  
that the information furnished by me, which appears on the obverse side of  
this license is true and that I am granting to the licensee pursuant to provision  
of Sec. 29-57, et seq. of said Code.

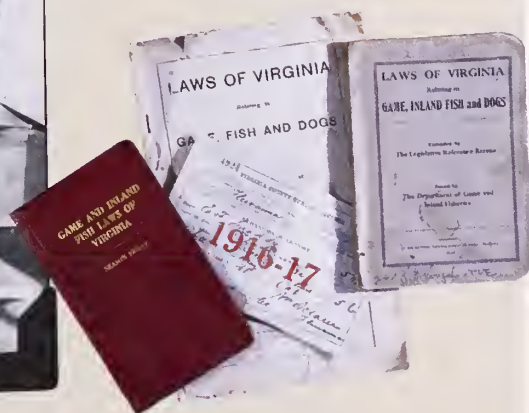
Signature \_\_\_\_\_







Then as now, the Game Department has relied upon volunteers to do much of its conservation business. The Izaak Walton League and the Boy Scouts have built their fair share of nest boxes for wildlife in cooperation with the Department. And even in the early days, we knew the value of quality habitat for wildlife, and encouraged landowners to improve their habitat. Habitat plantings are still a significant part of wildlife management, and today conservation groups such as Quail Unlimited, the National Wild Turkey Federation and Ducks Unlimited are helping us get the job done.







above: 1950 Trials at Hawfield Track  
below: 1950s-Checking in elk







*top left: 1949 VA Association of Fox Hunters at Farmville, with Master of the Hounds J.C. Causey*

*bottom left: 1950s-Game warden checking fox hunters' hunting licenses*

*above: 1950s-10-year-old Richard Graves of Fredericksburg with some of his grandfather's field trial beagles.*



There is a legacy of sportsmanship and comraderie in Virginia's hunting history. And much of it is inevitably connected with good hunting dogs. The Game Department has worked with field trial groups over the years, from those working their bird dogs to those running their fox hounds. The Game Department also has a history of bringing back wildlife to the state. Our many success stories, including deer and turkey, are mixed with a few failures - like the reintroduction of elk and pheasants into Virginia. But we learned from it all.

# Safety

## Wake Up to Your Wake

By William Antozzi, Boating Safety Officer

A couple of fishermen are out on the James River, Virginia; the weather is good, the fish are biting and then along comes a boat towing a waterskier and throwing a big wake. The wake violently rocks the fishing boat, throwing objects around in the vessel and causing general confusion and discomfort to the occupants.

A short distance away, several small boats are tied to a pier. The same towboat and waterskier come roaring along, still making a big wake which bangs the boats into the pier and causes them to crash into one another.

A couple and their two small children are in a canoe on Lake Chesdin, Virginia. A powerboat comes along, throws a huge wake and capsizes the canoe. The family members are in the water and the powerboat doesn't even stop. Nobody got the boat's registration number.

These are stories which are repeated throughout Virginia's waterways. Almost any boat can make damaging wakes which cause

injury and property damage, especially in congested areas.

Both federal and state boating laws plainly state that vessel operators are legally responsible for any damage caused by their vessels' wakes. Boat operators must reduce their wakes when near other boats so that they and their occupants are not endangered. Damage costs can be huge.

When boat operators are in open water, they often cruise at high speeds. When they enter congested areas or come close to boats that are anchored, they should reduce speed so that their wake is minimal. However, speeds are relative and after running at high speeds, 10 miles an hour may seem slow, when in fact it is not. The wake size depends upon speed and other factors, such as hull configuration, draft, the load being carried and the distance it travels to reach other boats or shore structures. Displacement hulls, such as most sailboats, usually throw less wake than do planing hulls at the same speed. Another fact is that at constant

speed, wakes made in shallow water are higher than in deep water.

Planing hull vessels can throw a big wake if they are going fast and are suddenly throttled down. They also put out a huge wake when getting up enough speed to get onto a plane.

Last weekend I was in a marina when a powerboat went by making an unacceptable wake. I suggested to the operator that he reduce speed, and he said his boat would not go any slower. The problem is that some planing hull vessels with big engines have the idle speed set at 900 or 1,000 revolutions per minute. With throttles pulled back as far as possible, the stern wake can be as high as two or three feet. If those vessels have twin engines, speed and wake can be reduced by using only one engine.

Many boaters ask for guidance on wake size to prevent injury and damage. I advise them to reduce the wakes so that they are no more than six inches high by the time they reach other vessels or shore structures.

The Virginia Department of Game and Inland Fisheries approves placement of regulatory markers such as "NO WAKE" buoys in Virginia waters. The approved buoys have the force of law and arrests of violators can be made or citations issued. Whether regulatory markers are used or not, the operators are still responsible for damage.

Many vessel operators do not realize that their wake is large enough to cause damage. When warned, they usually try to eliminate large wakes.

After all, it has been said that consideration for others is an indication of maturity.



photo by Mel White

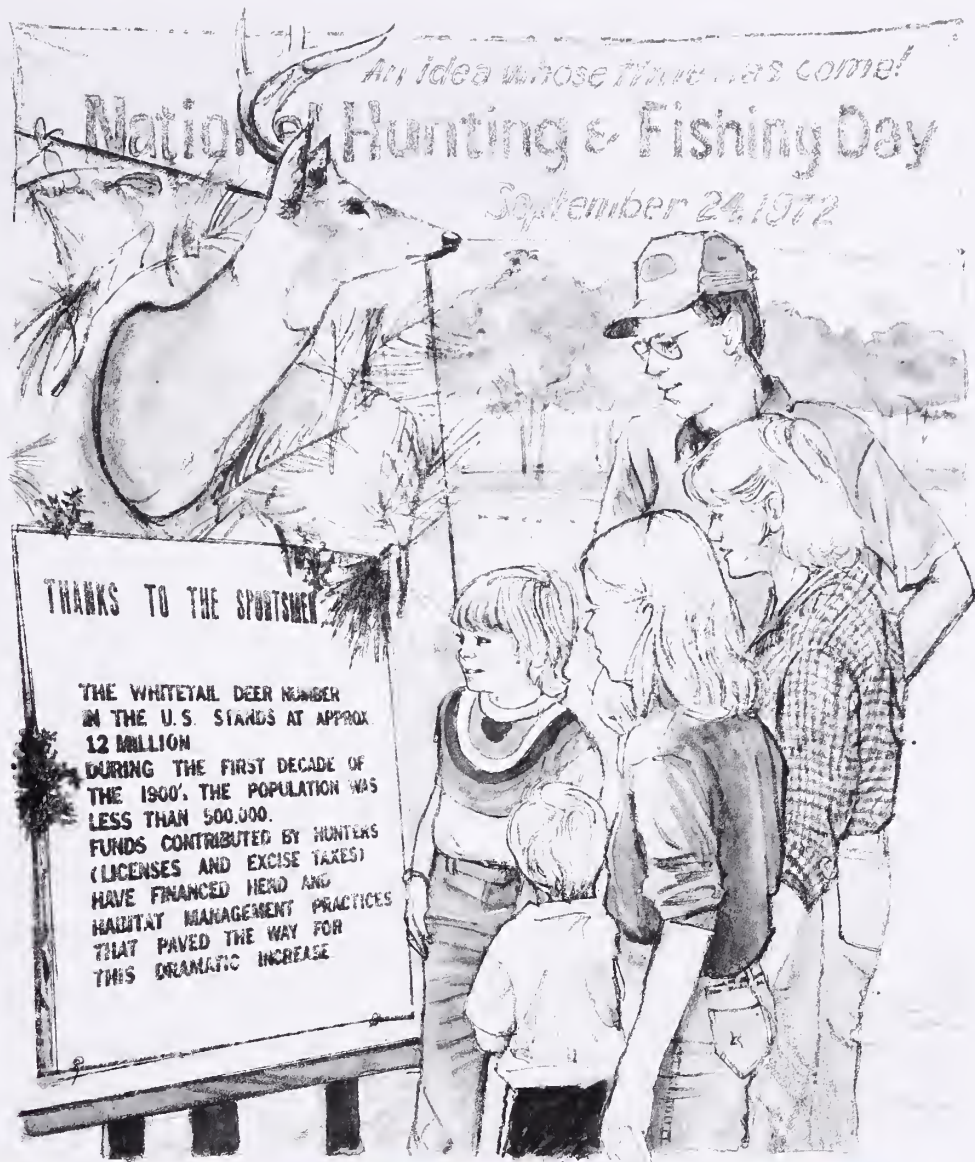


## AN IDEA WHOSE TIME HAS COME...AGAIN!!!

**W**hen Congress established National Hunting & Fishing Day 20 years ago, the day was hailed as "An idea whose time had come." Thousands of sportsmen's clubs across the nation hosted activities, publicizing the sportsman's role in conservation and enlisting public support of the wise management of our natural resources.

Today, the need to inform the public about the sportsman's role in supporting conservation has taken on a new importance, making the 20th Anniversary of National Hunting & Fishing Day on September 28, 1991, an idea whose time has come. Again!

You can join with your fellow sportsmen—and fellow sportsmen's clubs—in taking full advantage of



# AN IDEA WHOSE TIME HAS COME...AGAIN!!!



National Hunting & Fishing Day by obtaining one of the helpful and informative kits offered below. The *One-On-One Kit* is designed for the individual sportsman who wants to do his part to set the record straight. The *20th Anniversary Action Kit* helps clubs decide which course of action best suits their budget and interest.

## NATIONAL HUNTING & FISHING DAY® Sept. 28, 1991

To: National Hunting & Fishing Day®  
555 Danbury Road  
Wilton, CT 06897

Yes! I want to do my part to ensure the future of our sporting tradition.

- ☐ Please send \_\_\_\_ One-an-One Kits @ \$5.00 each  
☐ Please send \_\_\_\_ 20th Anniversary Action Kits @ \$7.50 each

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

# Photo Tips

## Talk to the Animals

By Lynda Richardson

I had ants in my pants. They were crawling around, casually biting my skin and parading up and down my arms as I lay beneath the sticky camo cloth on that humid day. I couldn't do a darn thing about them.

Since 4:30 in the afternoon, I had been waiting. I was lying on the sandy ground downwind of a red fox den. I knew the fox would come out eventually and I had to be in place well before then. You never know when animals want to start their day early.

Two hours later my ant-eaten body began to weaken. I began to think how nice a hot shower would feel or even the opportunity to just stand up for a minute. I cursed the ants as they continued to chew prickly pains up and down my body. In momentary desperation, I gave into crunching a few between two fingers. I knew the foxes would appear eventually, I just had to be patient.

The only thing that kept me going was the thought of photographing the three lovely fox pups I knew lived in the den. That is, if "mom" hadn't moved them the previous night. I turned to study the ants again. Large red ones had joined the feast. Quietly smacking a few more, I began to notice the black ones were carrying the dead reds away.

Absorbed in ants, I glanced up and was startled by a different red creature before me. A scraggly fox sat scratching and grooming near the den entrance. He looked around unconcerned and started to trot directly towards me. With a rush of adrenaline I tried to focus, but he approached too swiftly and I knew he'd be on top of me before I could get any shots.

So I snorted. Not just any snort, mind you, but one with purpose. I

was a nervous deer sounding an alarm. The fox stopped. His golden marbled-like eyes stared in my direction. He was so close I knew the sound of my camera would spook him, but I fired off four frames anyway knowing it might be my last chance. Uncertain, he turned away and trotted up the hill to his right. As he crested the hill I snorted again. The fox paused for a few more shots and then slowly turned and vanished.

My "snort" told the fox that something was wrong and it put him on alert. Maybe I should have made the sound of an injured bird or rabbit to spark his curiosity and possibly hold his attention longer. But whatever sound I chose, I was communicating with the fox. People usually understand human body and verbal language, but many of us are clueless when it comes to animal language. Like any foreign language, you need to study it before you can communicate properly.

In the United States, many of us only speak English. But animals are in a sense multilingual. They understand the sounds and body language of many species living in their homeland. As with my red fox, a deer alarm call is a warning to all animals that something big enough to threaten a deer is in the area.

By learning "animal language," you become more familiar with your wildlife subjects. You can learn to call these creatures to you, get them to look up, reassure or even position them by the use of a vocabulary they know. Recognizing animal language can also keep you out of trouble. The raised guard hairs of a rutting buck should be warning enough that you're getting too close and asking for a body full of antlers.

To learn about animal language I consult a variety of sources. I read lots of books and magazine articles



Red fox; photo by Lynda Richardson.

on animal behavior in both hunting and natural history publications. I talk with biologists specializing in various animals. And I listen to tapes of animal sounds and learn to mimic them. When learning to speak a particular animal language, I am careful to study the number of times a call is made and its duration. Emphasis and timing can change the meaning of a "phrase" just as it does in human speech. Combined with hours spent out in the field practicing (which is VERY important), you can quickly pick up a new "foreign" language.

Just as one communicates with fellow human beings, you need to decide what you want to say and how to say it properly to get a certain response. For example, I want to photograph bobwhites and I know there's a covey nearby. By learning the quail's "covey call," I can whistle in "quail talk" to my feathery buddies and usually they will come and see what's up. If I want to get a male quail to call for a photo, I might give a version of "Bob...Bobwhite" to encourage him. I've used the same technique in Africa to make wild male lions roar on command.

When I was taught French in school, my teacher Ms. Robertson always said, "To fully understand the people you must first learn their language."

You also need to be able to live with ants.



# 1991-92 Virginia Hunting Seasons

Species	Dates	Remarks
BEAR	October 12-November 9 November 25-January 4	Archery General Season
BOBCAT	November 1-January 31	Statewide (6 per year)
CROW	August 1-December 31 February 5-March 28	Statewide-Wednesday through Saturday only Statewide-Wednesday through Saturday only
DEER	October 1-November 30  October 12-November 16 November 11-November 16  November 18-January 4 November 18-November 30 November 18-January 4 December 2-January 4  December 16-January 4	Virginia Beach, Chesapeake, Suffolk (east of Dismal Swamp) Archery Early Muzzleloader  Isle of Wight, Suffolk (west of Dismal Swamp) West of Blue Ridge (general) East of Blue Ridge (general) Archery—West of Blue Ridge and Virginia Beach, Chesapeake, Suffolk (east of Dismal Swamp) Muzzleloader—designated western counties
FOX	Year-round November 1-January 31	Dogs only—statewide, with exceptions Statewide, with exceptions
GROUSE	November 4-February 8	West of I-95 (closed east of I-95)
PHEASANT	November 11-February 8 November 11-January 31	East of I-95 West of I-95
QUAIL	November 11-February 8 November 11-January 31	East of I-95 West of I-95
RABBIT	November 4-January 31	Statewide
RACCOON	August 1-May 31  August 1-January 31 October 15-March 10 October 15-January 31	Chase only—east of Blue Ridge (except National Forests) Chase only—west of Blue Ridge (private lands) East of Blue Ridge West of Blue Ridge
SQUIRREL	September 7-January 31 October 12-January 31	Statewide—designated southern counties Statewide—designated northern counties
FOX SQUIRREL	Same as squirrel but only in counties west of the Blue Ridge and Fairfax, Fauquier (except C.F. Phelps WMA), Loudoun and Rappahannock	
TURKEY	October 12-November 9 November 4-November 16 November 4-January 4 November 18-January 4 April 18-May 23	Archery Statewide with exceptions Designated counties Designated counties 1992 Spring Gobbler Season

## DEER BAG LIMITS

Statewide	2 per day, 3 per license year
Archery	2 per day, 2 per season (one must be antlerless)
Muzzleloader	1 per day, 1 per season (Early season—buck only; Late season—buck only except in counties where last 6 days are either sex)
Bonus Tags	2 tags for \$12.00 (resident) or \$25.00 (nonresident), one either sex and one antlerless valid in all counties east of Blue Ridge and Botetourt, Clarke, Frederick and Warren

# Recipes

## Bass for a Summer Dinner

By Jone Cone

With the price of fish in markets today, it makes sense to eat some good, fresh bass as a bonus from your time outdoors. Large-mouth, smallmouth and their near relatives all taste much the same—delicious!

As soon as you catch our bass, place them in a cooler with plenty of ice. This makes a tremendous difference, believe me. When you are ready to clean your fish, skin them right away. This will eliminate any muddy flavor that bass might have. If you plan on filleting your bass, do not scale them. Just take off the fillets and remove the skin with either your fillet knife or an electric carving knife.

### Menu

Blender Borscht  
Curried Bass Fillets  
Lemon Potatoes  
Eggplant Gratin  
Tomato-Mozzarella Salad  
Frozen Strawberry Delight

### Blender Borscht

2 cans (16 ounces each) whole beets,  
drained, reserve 1/4 cup liquid  
3/4 cup chicken broth  
1/2 teaspoon onion juice  
4 teaspoons fresh lemon juice  
1/2 teaspoon salt  
1/2 teaspoon sugar  
Dash freshly ground pepper  
Sour cream

Combine beets and reserved liquid with next 6 ingredients in blender or processor and puree until smooth. Taste and adjust seasoning. Transfer to medium bowl. Cover and refrigerate at least 8 hours, preferably overnight. Serve chilled and garnish with dollop of sour cream. Serves 4.

### Curried Bass Fillets

1 1/2 pounds bass fillets  
1 egg, beaten

1/2 to 1 teaspoon curry powder

Plain bread crumbs

3 to 4 tablespoons butter or margarine

Pour beaten egg into a flat-bottomed casserole. Add curry powder and mix together with a fork. Place fish fillets in casserole, cover with plastic wrap and refrigerate overnight. Turn fillets several times. When ready to cook, heat butter in a skillet. Remove fillets from egg mixture and roll in bread crumbs. Place fish in hot skillet and cook for several minutes, depending on thickness. Turn and cook on other side until fish flakes easily when tested with a fork.

Serves 4.

### Lemon Potatoes

2 pounds potatoes  
1/4 cup butter or margarine  
1 tablespoon lemon juice  
1 tablespoon snipped green onion tops  
Dash pepper  
Dash nutmeg  
1 teaspoon grated lemon peel

Pare potatoes; cook in boiling salted water, covered, till done, about 30 minutes. Drain and set aside. In small saucepan, heat butter with next 4 ingredients. Pour over potatoes, coating each potato well. Sprinkle with grated lemon peel. Serves 6.

### Eggplant Gratin

1 2-pound eggplant, cut into 1/2-inch slices

Mayonnaise

3/4 cup crushed saltine crackers

1/2 cup Parmesan cheese, grated

Preheat oven to 425 degrees. Coat both sides of eggplant slices lightly with mayonnaise. Combine crackers and cheese and dip eggplant slices into mixture. Place on greased cookie sheets and bake 15 minutes. Turn and bake 5 minutes more or until golden brown. Serves 4.

### Tomato-Mozzarella Salad

1/3 cup oil (preferably part olive oil)  
3 tablespoons thinly sliced chives  
4 teaspoons wine vinegar  
1 teaspoon Worcestershire sauce  
1/2 teaspoon basil leaves  
1/4 teaspoon sugar  
1/4 teaspoon salt  
1/8 teaspoon black pepper  
Lettuce leaves

1/4 pound sliced mozzarella cheese  
2 medium-size tomatoes, thinly sliced

Combine oil, chives, vinegar, Worcestershire sauce, basil, sugar, salt and pepper in jar with tight-fitting lid; shake to combine. Line serving plate with lettuce. Cut cheese slices into quarters or to a size approximately that of the tomato slices. Alternate cheese and tomato slices on lettuce. Drizzle with dressing. Serves 4.

### Frozen Strawberry Delight

1 cup flour  
1/2 cup chopped pecans  
1/2 cup butter or margarine, melted  
1/4 cup firmly packed brown sugar  
1 package (10 ounces) frozen unsweetened strawberries, thawed  
1 cup sugar  
2 teaspoons fresh lemon juice  
2 egg whites  
1 cup whipping cream, whipped

Combine flour, pecans, butter and brown sugar in an 8-inch square baking pan; stir well. Bake at 350 degrees for 20 minutes, stirring occasionally; cool. Combine strawberries, sugar, lemon juice and egg whites in a large bowl; beat at high speed with electric mixer for 10 to 12 minutes or until stiff peaks form. Fold in whipped cream. Press about 2/3 of crumb mixture into a 9-inch springform pan; spoon in strawberry mixture. Sprinkle remaining crumbs on top; freeze until firm. Makes 8 to 10 servings.



# Habitat

## Sassafras



Top: Sassafras sapling; photo by Spike Knuth  
Below: Sassafras flower; photo by Ken Lewis, Jr.

By Nancy Hugo

Once read that long before sighting land, Columbus knew that he was nearing our shores because he smelled the scent of sassafras wafting over the water. I love that story because, true or not, it gives sassafras the preeminent place in our history I think it deserves.

Although most scholars think the word sassafras is of Spanish origin, Native Americans had named this tree long before Europeans arrived in the Americas. The translation of one Indian word for sassafras means “smelling stick,” a reference to the agreeable odor of sassafras’s roots, bark leaves, and twigs. According to European observers, Indians gathered sassafras roots to cure the “sicke of any grief,” and the plant’s odor was believed to be a defense against

evil spirits. Wrote North Carolina’s surveyor general John Lawson in 1709: “One of our company [was treated] for lameness by scratching the same limb with a comb of rattlesnake fangs and applying a dressing of dried and ground sassafras, binding it up well. The patient recovered completely in a day or two.”

Englishmen were so convinced of sassafras’s medicinal properties that two ships were sent to the New World in 1603 to bring back sassafras bark (Sir Francis Drake had taken sassafras roots back to Europe even before that). According to some historians, sassafras was, in fact, the first forest product to be exported from the mid-Atlantic, and the search for it inspired many an exploration. Saloop tea, made from sassafras roots, became a popular drink in England, but its popularity waned when word got out that the Indians used it to treat syphilis spread by explorers—then nobody wanted to be seen drinking it!

No such concern do I have. I love sassafras tea, which you can make by letting a few roots or pieces of root bark steep in hot water. You can drink it hot or cold. I wouldn’t make a habit of drinking it, though. The Food and Drug Administration has banned sassafras tea for sale in interstate commerce because sassafras oil in high doses has been found to be carcinogenic. (You can still get Pappy’s sassafras tea concentrate in my grocery store, but it’s free of the suspected carcinogen safrole.) Scientific evidence does, however, confirm some of sassafras’s medicinal properties. It’s reportedly a demulcent (a substance capable of soothing the mucus membranes), an emollient (a skin-soother), a diuretic (increasing the flow of urine) and a diaphoretic (increasing perspiration.)

Although it can grow to 120', sassafras is usually a small tree or shrub.

It can often be found in fence rows, abandoned fields, and at woods’ edges where its distinctive leaves make it easy to recognize. They come in three shapes: elliptical, mitten shaped (with the thumb pointing right or left), and three-lobed (like a mitten with two thumbs).

Uses for sassafras are legion. Its durable wood has been used to make fence posts, railroad ties, and boat hulls, and, because aromatic sassafras wood was once believed to repel bedbugs and chicken lice, it was once a wood of choice for bedsteads and chicken houses. Sassafras is also the source of file, the thickening agent in gumbo. Filé (pronounced “fee-lay”) is made from sun-dried sassafras leaves crushed into a powder. Because they promote salivation when chewed, sassafras leaves and twigs are reportedly good mouthwashes and thirst quenchers. “If I could find a sassafras tree, I knew I could relieve my thirst by chewing its leaves,” says woodsman Henry Clepper, who chewed sassafras leaves when he was out fighting forest fires.

Wildlife use sassafras, too. Deer browse its twigs and foliage, rabbits eat its bark, songbirds and wild turkeys eat its bluish fruit. The principal users of sassafras fruit include catbirds, flycatchers, kingbirds, and pileated woodpeckers.

All in all, sassafras may be one of the most nibbled on plants in the woods, and even those who don’t want to chew its twigs or boil its roots can feast on it with their eyes. I love its spring blooms—airy sprays of chartreuse flowers. In the fall, it has brilliant orange and scarlet foliage. In fact, sassafras seedlings that I once pulled out of my garden, I now leave as ornamentals. Not only do I enjoy their beauty and their history, I can’t wait for a neighbor to tell me he’s smelled their fragrance wafting over my fence.



Bald Eagle; photo by Bill Lane

## *We're fighting for their lives.*

Many of Virginia's wildlife are in danger. Suffering from habitat loss and the dangers of pollution which threaten their survival, many species in the state are struggling to survive.

The Department of Game and Inland Fisheries is responsible for the protection and conservation of all wildlife in Virginia, but we receive no state tax dollars, and we need your help to do our job. Help us fund critical research and management programs for the state's nongame and endangered species by contributing to our Nongame Wildlife Fund, which is supported solely by voluntary contributions made through our state tax-checkoff program and direct giving.

Please use the gray card in back of this magazine to make a donation, or simply send your tax-deductible check (made payable to the Treasurer of Virginia), to: Virginia Nongame Wildlife Fund-VW, Virginia Department of Game and Inland Fisheries, P.O. Box 11104, Richmond, VA 23230-1104.



Virginia's Endangered Species poster is available for \$8, including shipping and handling by writing to: VA Endangered Species Poster Offer, Attn: Diane Davis, VDGIF, P.O. Box 11104, Richmond, VA 23230-1104. Please make checks payable to: Treasurer of VA.





## Give Wildlife A Ride

Why not give wildlife a ride by ordering a Wildlife Conservationist license plate from the Department of Motor Vehicles? This brand-new plate, created by the Virginia Department of Game and Inland Fisheries, is designed to generate money for the Game Protection Fund, which is used for wildlife conservation management and research.

Order yours today by filling out the application at the bottom of the page (using the instructions on the opposite page to guide you). Show how much you care for Virginia's wildlife by purchasing a Wildlife Conservationist license plate today!



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RENEW FOR TWO

VSA 61 (REV 7/91)

# We Are What We Were



**E**xperience shows. For over a decade we've been making a very special calendar. A calendar for you, one that gives you the information you want and need; like tide tables and guides to when and where you can land the really big ones. We also give you valuable hunting information and facts that will give you a greater knowledge of our nongame species.

One thing that has never changed is the excellence of the prints in our calendar, and this year's are perhaps the best we have ever offered. We've combined our skill and experience with that of some of the nation's best wildlife photographers and the result is 12 remarkable prints in a truly remarkable setting.

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# Perhaps We're Better Than We Were